

DATE ISSUED: July 12, 2001 REPORT NO. 01-146

ATTENTION: Natural Resources and Culture Committee

Agenda of July 18, 2001

SUBJECT: Manager's Response to the City Wide Canyon Sewer Maintenance Task

Force's Proposed Policies of March 28, 2001

REFERENCE: City Wide Canyon Sewer Maintenance Task Force's Final Report dated

March 2001

SUMMARY

Issues:

- 1. Should the City draft the City Wide Canyon Sewer Maintenance Task Force's following recommended proposed policies into City Policies:
 - Redirection of Flow
 - ► Installation of Individual Sewer Pumps
 - Access, Repair and Maintenance in Canyon and other Environmentally Sensitive Lands
- 2. Should the City Manager pursue creating an Entity Responsible for Canyon Oversight?
- 3. Should the City Manager pursue developing and implementing new contracting procedures for construction work that impacts canyons?

Manager's Recommendations:

- 1. Draft the City Wide Canyon Sewer Maintenance Task Force's recommended proposed policies into the following City Policies and adopt these policies:
 - Redirection of Sewage Discharge away from Canyons and other Environmentally Sensitive Lands
 - ► Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands
- 2. City Council provide specific direction on the percentage advantage to be applied in the economic analysis with respect to redirection of flow.
- 3. Create a work unit within the Park and Recreation Department for the purposes of managing open space lands, including publicly owned canyons and lands acquired under the Multiple Species Conservation Program.
- 4. Create a Canyon Management Committee with staff representatives from relevant Departments and the Public. This committee would provide a forum to review overall policy implementation, coordinate activities of various agencies/groups and discuss specific programs and projects. Its meetings would be open to the public. Possible City representatives would come from the Water, Park and Recreation, Engineering and Capital Projects, Planning and Development Review, Transportation, and Metropolitan Wastewater Departments. Possible non-City representatives would come from Environmental Organizations, Recreational Users, Utility Companies, Businesses, and Community Groups. The non-City members should be selected by the Natural Resources and Culture Committee (NR&C). Lastly, this committee would report to the NR&C on an annual basis.
- 5. The Task Force's recommendations for new contracting procedures for construction work is <u>not</u> in conformance with the City Charter.

<u>Additional Task Force Recommendations:</u> – The City Wide Canyon Sewer Maintenance Task Force recommends that some entity in the City assume responsibility for maintaining the hydrological function of the canyons.

<u>Implementation Strategy:</u> – For the purposes of providing inspection, cleaning, and maintenance services to the sewer facilities in the canyons the following short term and long term strategies shall be executed.

<u>Short Term Strategy:</u> – Currently, the Metropolitan Wastewater Department's Inspection, Cleaning, and Maintenance crews are assigned the responsibility of providing maintenance services for the City's entire sewer infrastructure, located in the right-of-

away, canyons, and other areas. The Metropolitan Wastewater Department will re-assign sewer maintenance crews to sewer infrastructure located within canyons. The inspection, cleaning, and maintenance services of some sewer facilities located within the right-of-away will be contracted out.

Inspection of sewer facilities located within canyons will begin immediately. Those sewer facilities that are determined to be in a critical state, for which there is a high probability of a spill occurring, will be cleaned and repaired. For the impacted canyons, biological and cultural resources will be investigated and identified. Necessary access routes (if any) will be selected to minimize, and if possible avoid, impacts to biological and cultural resources. Low impact canyon proficient vehicles and equipment shall be utilized as needed. All impacts shall be measured, documented, and mitigated.

Public outreach will be conducted for each canyon as part of the short term strategy.

<u>Long Term Strategy:</u> – The conditions and the needs for access for the existing sewer facilities located within the canyons will be assessed and then prioritized.

Redirection of sewer facilities out of the canyons will then be pursued in accordance to the guidelines of the proposed "Redirection of Sewage Discharge away from the Canyons and other Environmentally Sensitive Lands" policy.

For the facilities that can not be relocated, the following actions will be executed in accordance with the proposed "Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands" policy:

- 1. Emergency and Maintenance Access Plans will be developed. Also, Emergency Access Procedures will be developed and incorporated into the Metropolitan Wastewater Department's Departmental Instructions.
- 2. Necessary permanent access routes (if any) into canyons will be selected, designed, and constructed in accordance with the proposed "Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands" policy.

Also, in accordance with the proposed "Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands" policy low impact canyon proficient vehicles and equipment will be evaluated and acquired.

<u>Transition from Short Term Strategy to Long Term Strategy:</u> – It is anticipated that within about nine months Emergency and Maintenance Access Plans will be developed for many of the high priority sewer facilities located in canyons. Also, within that same period of time most of the research, analysis, and acquisition of low impact canyon proficient

vehicles and equipment will be complete. In some situations, the mapping and vehicle/equipment acquisition actions will make it possible to access sewer facilities located in canyons so that effective inspection and maintenance services can be provided with minimum to no impacts to the canyon environment. In these situations it will no longer be necessary to implement the short term strategy.

For the situations that mapping and vehicle/equipment acquisition actions do <u>not</u> make it possible to access sewer facilities located in canyons redirection of sewer facilities out of the canyons or permanent access routes will be pursued. It is anticipated that these actions will take several years to implement.

<u>Fiscal Impact:</u> – Financial Costs:

1. Proposed Policies:

Redirection of Sewage Discharge away from Canyons and other Environmentally Sensitive Lands:

Implementation of this policy will require the services of a Public Information Officer to facilitate the required public outreach services, a possible cost increase to the sewer pipeline replacement program for sewer projects that affect canyons to comply with Council's direction regarding the percentage advantage to be applied in the economic analysis, and additional cost to implement the pump policies and procedures.

The cost for the services of a Public Information Officer is estimated to be \$58,000/yr.

Implementation of the pump policy and procedure will require the City to pay for the design of the pumping system, the installation of the pumping system, a five year manufacturer's warranty on the pump, and operation and maintenance of the pump over the pump's expected life time (20 years). The costs are estimated to be:

1.	Designing the pumping system	\$2,500/pump
2.	Pump system installation	\$4,000/pump
3.	Five year manufacturer's warranty	\$1,000/pump
4.	Present value for operating & maintaining	
	The pump for twenty years	\$4,500/pump
	TOTAL:	\$12,500/pump

Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands: – Implementation of this policy will require funding for the

development of emergency and routine maintenance access maps, development and testing of environmentally sensitive access route materials, possible additional staff and staff training to implement low environmental impact practices for sewer maintenance in canyons, and the acquisition of low impact canyon proficient vehicles and cleaning equipment.

The cost to develop the emergency and routine maintenance access maps is estimated to be \$12,000/mile of pipe in the canyon. That includes biological and cultural data collection, utility research, design, and mapping services.

The cost for the development and testing of environmentally sensitive access route materials is estimated to be \$75,000. This includes the design, analysis, and selection of access route materials and field testing of those materials.

The cost for the additional staff and staff training to implement low environmental impact practices for sewer maintenance in canyons is unknown. The amount of reduction in sewer inspection and cleaning efficiencies that may result from the use of the new low impact canyon proficient vehicles and the implementation of low environmental impact practices is undetermined.

The cost for the acquisition of low impact canyon proficient vehicles and cleaning equipment is estimated to be \$1,500,000. This funding is for equipment research, analysis and equipment acquisition.

2. Creating a work unit within the Park and Recreation Department for the purposes of managing the MSCP and Open Space responsibilities.

The fiscal impacts resulting from this action are unknown. Currently, staff from the Park & Recreation Department & the Multiple Species Conservation Program are developing the new organization. At this time, specific staffing needs and other financial costs are undetermined.

3. Creating a Canyon Management Committee

It is anticipated that fiscal impacts resulting from this action will be minimal.

<u>Financial Benefits:</u> – It is anticipated that implementation of the proposed policies and other recommendations would offset the following financial costs.

1. Improved training of City Sewer Maintenance Crews in the area of sensitive habitat protection and erosion control could lead to a reduction of mitigation costs.

- 2. In some situations, relocation of sewer facilities from inaccessible canyon environments to accessible locations would make it easier to provide effective maintenance services leading to a reduction in the cost to maintain those facilities.
- 3. Acquisition of low impact canyon proficient vehicles and cleaning equipment will lead to more effective inspection and cleaning service to sewer facilities located in canyons, minimizing sewer spills and their associated fines. Also, acquisition of low impact canyon proficient vehicles and cleaning equipment reduces the need, and in some situations eliminates the need, for canyon access roads and their associated costs.

BACKGROUND

The City of San Diego has approximately 320 miles of sewer mains existing in canyons, most of which are inaccessible to city crews. Currently, routine maintenance, emergency repair, and inspection services can not be provided effectively for these sewer mains. Routine maintenance, emergency repair, and inspection services are necessary for minimizing sewer spills and their impacts. Three and half years ago the Metropolitan Wastewater Department with the assistance of the Engineering and Capital Projects Department proposed the construction of new access roads into many of the canyons that contain sewer infrastructure for the purpose of providing greater access to those sewer facilities. This proposal was confronted with much opposition from local community planning roups and environmental organizations. It became apparent that it was necessary to develop an alternative to the access road proposal.

On February 9, 2000, the Natural Resources and Culture Committee (NR&C Committee) authorized the creation of a City Wide Task Force to assist the City in developing a city wide policy for operating, maintaining, and accessing a sewer collection system where environmental health and public safety are protected and impacts to San Diego's urban canyons are eliminated or minimized. On March 28, 2001, the City Wide Canyon Sewer Maintenance Task Force gave their final presentation expressing their proposed policies and other related recommendations (listed below) to the NR&C Committee.

Proposed Policies:

- Redirection of Flow
- ► Installation of Individual Sewer Pumps
- Access, Repair and Maintenance in Canyon and other Environmentally Sensitive Lands

Related Recommendations:

- Entity Responsible for Canyon Oversight
- New hiring procedures for construction work that impacts canyons

During the March 28, 2001, NR&C Committee meeting the Committee requested the City Manager return with a complete analysis and implementation strategy, including a matrix of recommendations, options and costs.

ALTERNATIVES

1. Do not draft the City Wide Canyon Sewer Maintenance Task Force's proposed policies into city policies, and do not adopt those policies. Also, do not pursue the other related recommendations, and return the previous proposal to construct canyon access roads. Considering the past opposition to this proposal, this is not recommended.

Respectfully submitted,		
Frank Belock, Jr.	Approved:	George I. Loveland
Director		Senior Deputy City Manager
Engineering & Capital Projects Department		
Scott Tulloch		
Acting Director		
Metropolitan Wastewater Department		

Note: The attachments are not available in electronic format. A copy is available for review in the Office of the City Clerk.

Attachments:

- 1. Redirection of Sewage Discharge away from Canyons and other Environmentally Sensitive Lands Draft Council Policy
- 2. Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands Draft Council Policy
- 3. City Wide Map of Sewer Infrastructure and Canyons
- 4. City Wide Canyon Sewer Maintenance Task Force Final Report dated March 2001
- 5 Memo from City Attorney's Office

Due to the size of the attachments they will not be reproduced but can be reviewed in the City Clerks office.